

The first five options are checkbox menu items which toggle the visibility of the **Toolbar**, **Sidebar**, **Tool Settings**, **Asset Shelf**, and **Last Op panel** (labelled: **Adjust Last Operation**).



Frame All adjusts the zoom factor to include all objects in the scene. Alternatively, press the **Home** key.

Frame Selected adjusts the view so that the currently selected objects occupy a large part of the *3D Viewport*. This may require zooming in or out, but the viewpoint will not change. Below we can see the result when the two cushions are selected.



Perspective/Orthographic toggles between perspective and orthogtaphic views. Alternatively, press **5** on the numpad.

Perspective View

Orthographic View







Blender Basics: Meshes in Object Mode

View Region is another entry in the View menu that has its own submenu.



As we change viewpoint, the region remains but we get the impression that we have cut through the objects when we defined the box area. In fact, this is a useful technique for revealing hidden faces. The keyboard shortcut is **Alt+B**.



If we want to switch between full view and the identical restricted region more than once, this can be controlled by using the **Render Region checkbox** in the *View page* of the *Sidebar*.



Clipping Region only works when the *3D Viewport* is using *Solid Shading*. This option allows us to view only a specified region of our scene, with the remaining part of the viewport appearing empty.



Render Region (**Ctrl+B**) requires the display to be in *Material Preview mode* or *Rendered mode*. Again, we get to select an area of the scene and only that area will be rendered. This time objects are not "cut" and the view will remain "normal" as we orbit.



If we are displaying the render camera view (toggled by pressing **0** on the numpad), when we activate **Render Region**, it's only that defined region that will appear in the final render.





Play Animation is the next entry in the View menu. This plays through the frames of an animation as seen from the *3D Viewport's* viewpoint. Pressing the **Spacebar** will normally perform the same operation.

If don't want an unrendered area in the final rendered image, we can check the **Crop to Render Region** in *Output page*.



Viewport Render Image creates a rendered image from the 3D Viewport's viewpoint using the Viewport's display mode.



Render Viewport Animation and Render Viewport Keyframes both relate to animation so we'll leave them for a later chapter, enough to say that they both use the *3D Viewport's* viewpoint and display mode when producing results. **Area** has its own submenu. This offers various ways of adjusting the appearance of the *3D Viewport*. The first entry in the submenu is **Toggle Quad View** (shortcut **Ctrl+Alt+Q**) which splits the *3D Viewport* into four differt Viewports. Three of these have named viewpoints: *Top, Front* and *Right* while the fourth is the viewpoint being used immediately before the screen split was executed.



Horizotal Split creates a draggable horizontal line across the 3D Viewport. Dragging the line to the desired location, and left-clicking splits the 3D Viewport into two Viewports.



Toggle Maximize Area (shortcut **Ctrl+Spacebar**) expands the *3D Viewport* to file most of the Blender window but elements such as the menu, Toolbar and Navigation gizmo and Status Bar remain.



Duplicate Area into New Window opens a new window containing a copy of the **3D Viewport**.



Vertical Split is similar to *Horizontal Split*, but this time with a vertical line.



Toggle Fullscreen Area (shortcut **Ctrl+Alt+Spacebar**) expands the *3D Viewport* even further than the previous option. Here only the Navigation gizmo remains.



Close Area closes the 3D Viewport with one of the other Editors (usually the Timeline when using the default layout) expanding to occupy the space.



Blender Basics: Meshes in Object Mode